

REMARKS

Upon entry of the instant amendment, claims 91, 94-119, 132 and 133 will be amended, and claims 137 and 138 will be added. Claims 91-138 will be pending.

Applicants note that claim 105 has been amended to even more clearly recite Applicants' subject matter in accordance with Applicants' originally filed application, including but not limited to, page 13, beginning at line 3, wherein the disclosure includes that the sheet-like porous body is a porous material which comprises porous portions such as fine pores or interfiber spaces with cells trapped on the surfaces of the porous portions.

Still further, the claims, including the withdrawn claims, have been amended to be more in accordance with idiomatic English and standard U.S. practice, and to utilizing "at least one" language in place of "and/or" language.

Reconsideration and allowance of the application are respectfully requested.

Information Disclosure Statement

Applicants express appreciation for the inclusion with the Office Action of initialed copies of the Forms PTO-1449 submitted with the Information Disclosure Statement filed April 7, 2006 as well as the Examiner's consideration of the Information Disclosure Statements filed April 7, 2006 and May 23, 2006.

Claim Of Foreign Priority

Applicants also express appreciation for the acknowledgement of the claim of foreign priority as well as receipt of the certified copy of the priority application.

Response To Maintaining of Restriction Requirement

The Office Action has made the restriction requirement final, and indicates that claims 105-120 are pending.

In maintaining the restriction, the Office Action asserts that U.S. Patent No. 5,510,102 discloses the subject matter of non-elected claim 91 by asserting that this patent “teaches an wound healing composition that is made of plasma, platelets and a porous polymer such as alginate that can form a gel that covers the wound like a sheet (see summary of invention and col 8, lines 64-67).”

In response, to the maintaining of the restriction requirement, Applicants initially note that the Office Action incorrectly notes the pending claims. In this regard, at the time of the Office Action, claims 91-136 are pending, with claims 91-104 and 121-136 being withdrawn from consideration as being drawn to non-elected groups. Presently, claims 91-138 are pending, with claims 105-120, 137 and 138 being directed to the elected group of invention, and claims 91-104 and 121-136 being withdrawn.

Regarding the merits of the restriction, Applicants note that the support for the lack of unity of invention is not appropriate because the Office Action has not established that any claimed subject matter is rendered non-patentable over U.S. Patent No. 5,510,102. In this regard, the Office Action merely makes generalizations regarding the subject matter disclosed in this patent, but does not indicate how such subject matter renders the subject matter recited in claim 91 unpatentable thereover. For example, the Office Action asserts that the patent discloses a porous polymer; however, the Office Action does not establish where the patent discloses that the polymer gel is porous, or where the patent discloses any combination of subject matter recited in claim 91.

Applicants again submit that unity of invention is present, and each of the pending claims should be examined on the merits. Accordingly, a complete action on each of the pending claims is requested.

Claim Rejections Under 35 U.S.C. 112, Second Paragraph

Claims 105-120 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite.

In response, Applicants submit that the subject matter recited in the claims prior to the present amendment definitely recites Applicants' subject matter. However, in an attempt to advance prosecution of the application, the claims have been amended herein to address issues raised in the rejection.

Regarding the amendments to the claims and the indefiniteness rejection, Applicants particularly notes the following.

The claims have been amended to change "sheet-like porous body" to ---sheet-shaped porous body---.

The terminology "sponge construct" has not been amended as this terminology is readily understandable to one having ordinary skill in the art. See, for example, Applicants' specification at page 15, beginning at line 14, wherein it is disclosed that:

The term "sponge construct" used herein refers to a structure having three-dimensional network of connective tissues with continuous open pores. The material of the sponge construct is not particularly limited. Natural polymers, such as cellulose or derivatives thereof, or polymer materials mainly composed of hydrophobic polymers, such as polyolefin, polyamide, polyimide, polyurethane, polyester, polysulfone, polyacrylonitrile, polyethersulfone, poly(meth)acrylate, a butadiene-acrylonitrile copolymer, an ethylene-vinyl alcohol copolymer, polyvinyl acetal, or a mixture thereof, are preferably used because of their high cell adhesion.

Additionally, “and/or” language has been changed to ---at least one--- language.

Thus, as indicated above, the claims have been amended in an attempt to advance prosecution of the application and/or Applicants submit that the claim scope is readily understandable to one having ordinary skill in the art. For example, Applicants submit that one having ordinary skill in the art would readily understand the meaning of “mature cells” (as see, for example, the third full paragraph on page 18 of Applicants’ specification). However, if the Examiner deems that any changes to the claims would be desirable, the Examiner is requested to contact the undersigned to discuss the same.

Accordingly, this ground of rejection should be withdrawn.

Claim Rejections Under 35 U.S.C. 102 and 103

The following rejections are set forth in the Office Action.

Claims 105-107, 115 and 120 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,843,156 to Slepian et al. (hereinafter “Slepian”).

Claims 105-115 and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slepian.

Claims 105-115 and 117-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slepian further in view of Hood, U.S. Patent No. 5,733,545.

Claims 105-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slepian in view of Hood, and further in view of van Blitterswijk, U.S. Patent No. 6,383,220.

In response to these grounds of rejection, Applicants respectfully submit that Slepian, whether taken alone or in combination with Hood and/or van Blitterswijk, does not arrive at the

subject matter recited in Applicants' claims whereby the rejections of record should be withdrawn.

Applicants' independent claim 105 is directed to a method for preparing a wound-healing promoting material which comprises contacting at least one of leukocytes and platelets with a sheet-shaped porous body to trap the at least one of leukocytes and platelets on surfaces of pores of the porous body. Applicants submit that Slepian does not disclose such a method for preparing a wound-healing promoting material, whereby the anticipation rejection is without appropriate basis and should be withdrawn.

Moreover, claim 120 is directed to a wound-healing promoting material which is obtained by the method for preparing a wound-healing promoting material according to claim 105.

Thus, Applicants' claim 105 includes, amongst other features recited therein, that the least one of leukocytes and platelets is trapped on surfaces of pores of the porous body, and the wound-healing promoting material includes at least one of leukocytes and platelets on surfaces of pores of the porous body.

In contrast, Slepian is directed to a material wherein bioactive agent is incorporated in polymeric material. The polymeric material may be gel material. The bioactive agent may be a cell such as platelet ghost. However, bioactive agent is physically or chemically incorporated into a polymeric material in a fluent state so that the material becomes non-fluent in the polymeric material after being layered in use.

In particular, Slepian is directed to methods for creating *in situ* specific local interactions of cellular interactions in living tissue. Slepian discloses that this is accomplished by applying a fluent material which forms a local, selectively permeable barrier, alone or in combination with

specific bioactive molecules, directly to a site to be treated. Upon application, the fluent material is disclosed as conforming to the tissue and converted to a less fluent state by alteration in temperature, ion concentration, application of shear force, or chemical or physical polymerization or crosslinking.

Slepian discloses an embodiment wherein cellular interactions, such as formation of thrombus, inflammation, or adhesions, are inhibited by physically blocking cellular and/or macromolecular interactions while allowing selective permeability to nutrients, gases, and other molecules. Permeability is disclosed to be controlled by selection of the material, method of manufacture, density, degree of crosslinking, molecular weight of monomer units, incorporation of particulate or other material, and degradability or non-biodegradability of the polymeric material.

Slepian also discloses another embodiment wherein the polymeric gel is provided in combination with bioactive molecules, especially those providing contact guidance, or chemotactic or haptotactic activity, which can be utilized to alter cell proliferation, migration, and inflammatory reactions. The bioactive molecules are incorporated by Slepian in the fluent state and are layered with the polymer when the polymer is applied as a layer.

Accordingly, it is readily seen that Slepian does not disclose contacting at least one of leukocytes and platelets with a sheet-shaped porous body to trap the at least one of leukocytes and platelets on surfaces of pores of the porous body, and the anticipation rejection should be withdrawn. In this regard, if the rejection is maintained, Applicants respectfully request that the rejection provide specific reference to portions of Slepian with respect to Applicants' recited subject matter.

Moreover, in Slepian, platelet ghost is exemplified as the cells. Namely, Slepian discloses a material which contains cell ghost which does not contain intracellular components. In cell ghost, intracellular granules are considered to be eliminated. Such cell ghost are not Applicants' at least one of leukocytes and/or platelets.

Accordingly, claims 105-120 are not anticipated by Slepian, and the anticipation rejection should be withdrawn.

Regarding the obviousness rejections, Applicants submit that one having ordinary skill in the art would not have arrived at Applicants' claimed subject matter from the documents utilized in the rejections of record. In this regard, one having ordinary skill in the art would not have combined the disclosures of the documents in the manner recited in the rejections. Moreover, even if for the sake of argument the disclosures were combined, Applicants' claimed subject matter would not be present.

For example, Applicants initially note that one having ordinary skill in the art would not have modified Slepian to arrive at Applicants' claimed subject matter for at least the reasons set forth above.

Moreover, the deficiencies of Slepian are not overcome by either of Hood or van Blitterswijk. In this regard, Hood is utilized in the rejection apparently for its disclosure of fibrin. Accordingly, even if Hood is combined with Slepian, Applicants' claimed subject matter would not be present.

Moreover, Hood relates to providing a plasma-buffy coat concentrate that includes plasma and concentrated platelets and fibrinogen, and discloses that, in a preferred embodiment, the plasma-buffy coat concentrate also includes concentrated white cells. Further, Hood discloses

that the plasma-buffy coat concentrate can be combined with a fibrinogen activator to produce a wound sealant.

Van Blitterswijk is utilized in a rejection apparently merely for the assertion that it would have been obvious to incorporate fibroblasts in the wound healing method of Slepian and Hood. Therefore, even if van Blitterswijk is combined with Slepian and Hood, Applicants' claimed subject matter would not be present.

Accordingly, the rejections of record should be withdrawn as the documents utilized in the rejections of record do not teach or suggest Applicants' claimed subject matter as recited in independent claim 105 and further defined in the dependent claims.

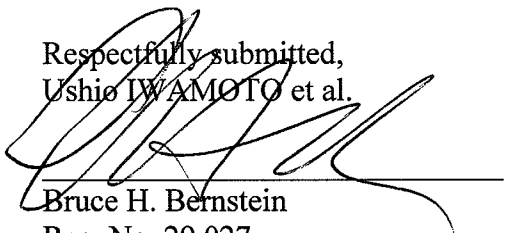
CONCLUSION

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the restriction requirement and rejections of record, and allow all the pending claims.

Allowance of the application is requested, with an early mailing of the Notices of Allowance and Allowability.

If the Examiner has any questions or wishes to further discuss this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,
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